

Instant detection of milk adulterants by nanotechnology based dip strip test

- India is the largest milk producer country in the world. But, across the country, today milk adulteration is haunting problem, about 68% of the milk is contaminated or adulterated with malpractice in milk supply chain.
- According to the report of FSSAI, in the 33 states study, milk was found adulterated with detergent, fat and even urea, besides the age-old dilution with water.
- Detection of adulteration in milk is huge challenge at the entry level at the village milk cooperatives. For the detection of adulterants in the milk, sophisticated laboratory and costly instruments are required and also trained personnels to handle the instruments.
- Kamdhenu University, College of Dairy Science Amreli, developed dip strip for instant detection of adulteration in milk, which is portable, accurate, rapid, cheaper and reliable. This dip strip test has been developed for detection of milk adulterants like starch, urea, hydrogen peroxide, boric acid, detergent, neutralizer, maltodextrin and ammonium sulphate.
- The strip test developed by Kamdhenu University, can be used in interior parts of Gujarat and India wherein people are unaware about the testing of milk adulterants, along with inadequate facilities for their detection. Moreover, this milk strip test is useful to the common people for the detection of adulterants in milk at household level.

